

POOR LEGIBILITY

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CH2MHILL

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April 13, 2009

277085.31.LC/XC2006217A

Mr. Henry Chui
California Environmental Protection Agency
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2737

Subject: Polychlorinated Biphenyls at Building 688 UL#02 In Investigation Area C2, Where No Further Action is Required under the Department of Toxic Substances Control Consent Agreement

Dear Mr. Chui:

CH2M HILL prepared this letter in compliance with the requirements in the Consent Agreement for Lennar Mare Island, LLC's (LMI), Eastern Early Transfer Parcel (LMI et al. 2001) signed April 16, 2001, by LMI, the City of Vallejo, and the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) and according to the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003). The letter requests DTSC concurrence that a no further action (NFA) determination is appropriate, with respect to polychlorinated biphenyl (PCB) contamination, as part of the overall regulatory closure process for the PCB Site Building 688 UL#02, on LMI's Eastern Early Transfer Parcel. An NFA determination is appropriate because a site-specific risk evaluation, presented in this letter, demonstrates that the potential risks associated with exposure to residual PCBs at PCB Site Building 688 UL#02 are at the low end of the risk-management range and the hazard index for the industrial worker is less than 1. The results of the investigations show that no cleanup activities are necessary at PCB Site Building 688 UL#02.

Site Identification

Using visual site surveys, reviews of historical records, building closure reports, and databases of electrical equipment, the United States Department of the Navy (Navy) identified sites where PCB-containing equipment was located, PCB spills were documented, or contamination was suspected because of building history or visible stains (Tetra Tech Environmental Management, Inc. [TtEMI] 1999). Navy personnel from Supervisor of Shipbuilding, Conversion and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS) conducted interim PCB assessments and performed cleanup actions (e.g., washing, scabbling) in accordance with technical work documents (TWDs), where necessary.

Building 688, a pump test shop built in 1941, is located east of Railroad Avenue and south of Oklahoma (formerly 13th) Street in Investigation Area C2 (Figure 1). Building 688 is currently occupied and used for material storage. According to the *Preliminary Land Use Plan*

(SWA Group 2000), Building 688 is in an area designated for future industrial use. Figure 1 shows the location of Building 688.

There are three previously-unidentified PCB sites associated with Building 688 that were not listed in the Consent Agreement signed April 16, 2001 between LMI, the City of Vallejo, and the State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) (LMI et al. 2001): UL#01, UL#02, and UL#03. PCB Site Building 688 UL#02 is defined as the building floor stains in the northern, southeastern, and central interior of Building 688. PCB Site Building 688 UL#01 consists of concrete, manholes, soil, and asphalt associated with a transformer pad adjacent to the western exterior wall of Building 688 and is being addressed for closure in a separate submittal. PCB Site UL#03 consists of loose sediment and debris inside covered and steel-lined pits beneath the floor of Building 688 and is being addressed for closure in a separate submittal (Figure 1).

Site Investigations and Cleanup Actions

Table 1 summarizes the previous sampling at Building 688 UL#02. This table includes the sample numbers, matrices, dates, and total PCB concentrations (or laboratory reporting limit if PCBs were not detected).

The following site investigation summary is based on CH2M HILL's review and interpretation of historical information contained in TWDs 95-0328 and 95-0340, which were discovered during transition of Navy documents to LMI prior to commencement of work under the Consent Agreement. From this historical documentation, it appears that in April 1995, SSPTS performed PCB sampling activities inside Building 688. A hand-annotated, undated figure attached to the TWDs (Attachment 1) appears to show approximately 40 proposed sample locations on the first floor of Building 688; however, there is only documented evidence of four samples being collected based on the laboratory data sheets and proposed actions at two targeted locations presented in the TWDs. The laboratory data sheets for the four samples collected by SSPTS (5103-0644, -0645, -0667, and -0668) are summarized in Table 1 and are provided with the TWDs for reference in Attachment 1. The approximate location of two of the four samples collected by SSPTS whose PCB concentrations were 4.09 micrograms per sample area ($\mu\text{g}/\text{sample}$) (5103-0667) and 2.45 $\mu\text{g}/\text{sample}$ (5103-0645) were not specifically identified in the TWDs, but their approximate location inside Building 688 has been plotted in Figure 2 using the locations on the hand-annotated figure in TWD 95-0328 (SSPTS 1995a-b). The location of the remaining two wipe samples was determined from the TWDs. Wipe sample 5103-0668 (15.1 $\mu\text{g}/\text{sample}$) was collected from a stained area in the southwestern part of Building 688, and wipe sample 5103-0644 (11.2 $\mu\text{g}/\text{sample}$) was collected from the stain in the northern part of Building 688 (SSPTS 1995 a-b) (Figure 2).

As part of TWD 95-0328, SSPTS decontaminated the stain in the northern part of Building 688 where previous wipe sample location 5103-0644 (11.2 $\mu\text{g}/\text{sample}$) was collected (SSPTS 1995b) (Figure 2). The floor stain was double-washed/-rinsed with industrial-strength detergent or non-ionic surfactant solution (Attachment 1). Additionally, as part of TWD 95-0340, SSPTS decontaminated a stain in the southeast end of Building 688 where previous wipe sample location 5103-0668 (15.1 $\mu\text{g}/\text{sample}$) was collected (SSPTS 1995a) (Figure 2). The floor stain was double-washed/-rinsed with industrial-strength detergent or non-ionic surfactant solution (Attachment 1).

Based on historical laboratory data sheets, in 1996, SSPTS collected one concrete chip sample (6120-0018) from a stain in the northern part of the building (1.6 milligrams per kilogram [mg/kg]), one oil sample (6120-0019) from a starting compensator (3.9 parts per million) that was located in the southern portion of the building at that time, and one additional concrete sample (6120-0017) from an unknown location (1.5 mg/kg). Based on visual observations from inside the building, it is believed that the starting compensator from Building 688 was removed prior to CH2M HILL's involvement at the site.

On June 28, 2002, CH2M HILL collected one wipe verification sample (B688UL2WP0273) from the northern stain and one concrete chip verification sample (B688UL2CH0274) from the southeastern stain (Figure 2). PCBs were detected in wipe sample B688UL2WP0273 at a total concentration of 1.32 micrograms per 100 square centimeters ($\mu\text{g}/100\text{ cm}^2$) and in concrete chip sample B688UL2CH0274 at a total concentration of 0.42 mg/kg (Figure 2).

Polychlorinated Biphenyl Site Closure Process

According to the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003), and under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), NFA is appropriate at a PCB site if no potential source and no PCB contamination are present. Even if a potential source or PCB contamination is present in machinery or building materials, NFA is appropriate under CERCLA if there has been no release of PCBs to soil or groundwater and no visible pathway exists for migration of PCBs to soil or groundwater. If there has been a known release to soil or groundwater, NFA is also appropriate if the detected PCB concentrations in soil and groundwater do not exceed the applicable screening levels, or if results of a site-specific risk evaluation demonstrate that potential risks associated with exposure to residual PCBs are within the risk-management range generally used to determine whether cleanup is necessary.

Following the cleanup action at PCB Site Building 688 UL#02, the maximum remaining total PCB concentration in a concrete sample is 1.6 mg/kg. The exposure point concentration (EPC) for total PCBs in concrete, using the 95 percent upper confidence limit on the mean generated using proUCL 4.0, is 1.6 mg/kg (maximum value). As a screening-level assessment of potential cancer risks and noncancer hazards associated with exposure to residual levels of PCBs in floor materials, the risk ratio approach was used to calculate cancer risk and hazard index estimates that are based on the United States Environmental Protection Agency's (USEPA's) regional screening levels (RSLs) and the EPC. Using the EPC, the estimated potential risk from exposure to solids in an industrial setting at PCB Site Building 688 UL#02 is 1.8×10^{-6} (EPC for total PCBs [1.6 mg/kg] divided by the USEPA RSL for cancer effects [$0.86\text{ mg/kg} \times 10^{-6}$]), and the hazard index is less than 1 (EPC for total PCBs [1.6 mg/kg] divided by the USEPA RSL for noncancer effects for the industrial worker [11 mg/kg] = 0.15).

The total cumulative potential risk from exposure to PCBs in the building materials (wood, asphalt, and concrete) at PCB Site Building 688 UL#02 is 2×10^{-6} . This is likely an overestimate of potential risks because the RSL that was used in the risk calculation for solid media is based on soil exposure and includes the inhalation, dermal contact, and ingestion exposure routes and an exposure frequency of 250 days per year. In addition, for each of the exposure routes, the exposure assumptions for intake of PCBs in soil probably overestimate intake of PCBs in the floor.

According to the risk evaluation results, and because conservative assumptions were used in the risk calculations for this site, no further PCB cleanup is necessary at PCB Site Building 688 UL#02. Therefore, the conditions for DTSC closure of PCB sites have been met for this site. An NFA determination under CERCLA would be protective of human health and the environment at PCB Site Building 688 UL#02, with implementation of a land use covenant limiting the property to industrial use.

Conclusions

The estimated potential cumulative risk for PCBs in building materials (concrete floor) in an industrial setting at PCB Site Building 688 UL#02 is 2×10^{-6} , and the hazard index (industrial worker scenario) is less than 1. The results of the site-specific risk evaluation completed for PCB Site Building 688 UL#02 demonstrate that potential risks associated with exposure to residual PCBs at PCB Site Building 688 UL#02 are at the lower end of the risk-management range generally used to determine whether cleanup is necessary (1×10^{-4} to 1×10^{-6}).

Therefore, in accordance with the *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003), NFA is appropriate for PCB Site Building 688 UL#02. Consequently, it is requested that DTSC issue an NFA determination under CERCLA, with implementation of a land use covenant limiting PCB Site Building 688 UL#02 to industrial use. This land use covenant will run with the land, and will be enforceable by the DTSC, with USEPA as a third-party beneficiary.

Please respond to this letter with confirmation that, in accordance with the approved *Final Polychlorinated Biphenyl Work Plan* (CH2M HILL 2003), NFA under CERCLA is appropriate for PCB Site Building 688 UL#02. Please submit your response to Stephen Farley at the above address or via email at Stephen.Farley@ch2m.com. If you have questions regarding the PCB site addressed in this letter, please contact Jennifer Lindquist at 530/229-3224 or Stephen Farley at 707/562-1015, extension 103.

Sincerely,

CH2M HILL



Jennifer L. Lindquist
Project Manager



Stephen M. Farley, P.G.
Quality Control Manager

(B688UL#02_DTSC.doc)

Enclosures: Table 1, Figure 1, and Figure 2

References

CH2M HILL. 2003. *Final Polychlorinated Biphenyl Work Plan*. March 7.

Lennar Mare Island, LLC (LMI), the City of Vallejo, and the State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). 2001. *Consent Agreement Between Lennar Mare Island, the City of Vallejo, and the State of California, California Environmental Protection Agency, Department of Toxic Substances Control*. April 16.

Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia, Environmental Detachment (SSPORTS). 1995a. *PCB Decontamination Technical Work Document (TWD) No. 95-0340*. June.

_____. 1995b. *PCB Decontamination Technical Work Document (TWD) No. 95-0328*. June.

SWA Group. 2000. *Preliminary Land Use Plan*. May 23.

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<http://epa-prgs.ornl.gov/chemicals/index.shtml>. September.

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TABLE 1

Sample Results for Building 688 UL#02

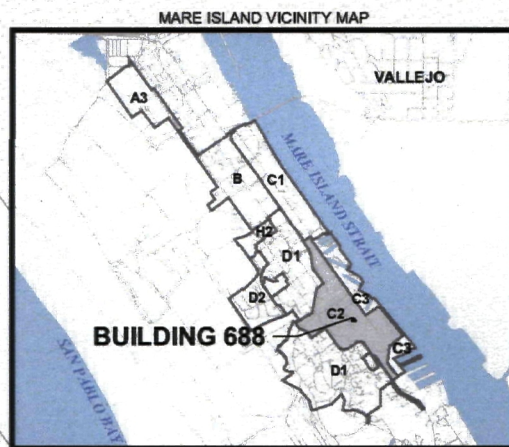
PCB Sites, Lennar Mare Island, Vallejo, California

| PCB Site Name | Site Description | Sample Number | Sample Matrix | Sample Date | Total PCB Concentration | Comments |
|--------------------|--------------------------|---------------|---------------|-------------|-----------------------------|--|
| Building 688 UL#02 | Interior of Building 688 | 5103-0644 | Concrete wipe | 04/14/1995 | 11.2 µg/sample | Stain in northern portion of building; removed per TWD 95-0328; Aroclor-1254 |
| | | 5103-0645 | Concrete wipe | 04/14/1995 | 2.45 µg/sample | Collected from southern portion of building; Aroclor-1254 |
| | | 5103-0667 | Concrete wipe | 04/17/1995 | 4.09 µg/sample | Collected from southern portion of building; Aroclor-1254 |
| | | 5103-0668 | Concrete wipe | 04/17/1995 | 15.1 µg/sample | Stain in southeastern portion of building; removed per TWD 95-0340; Aroclor-1254 |
| | | 6120-0017 | Concrete chip | 04/1996 | 1.5 mg/kg | Unknown location inside Building 688; Aroclor-1260 |
| | | 6120-0018 | Concrete chip | 04/30/1996 | 1.6 mg/kg | Stain in northern portion of building; Aroclor-1260 |
| | | 6120-0019 | Oil | 04/1996 | 3.9 ppm | Oil sample from starting compensator (removed); Aroclor-1260 |
| | | B688UL2WP0273 | Concrete wipe | 06/28/2002 | 1.32 µg/100 cm ² | Verification sample associated with cleanup of 5103-0644; |
| | | B688UL2CH0274 | Concrete chip | 06/28/2002 | 0.42 mg/kg | Verification sample associated with cleanup of 5103-0668; |

mg/kg milligrams per kilogram
 µg/100 cm² micrograms per 100 square centimeters
 ND not detected (laboratory reporting limit)
 ppm parts per million
 PCB polychlorinated biphenyl



| UNKNOWN SAMPLE LOCATIONS | |
|--------------------------|-------------------|
| CONCRETE CHIP SAMPLE | PCB CONCENTRATION |
| 6120-0017 | 1.5 mg/kg |



SAMPLE LOCATION ID _____ 5103-0644 (95)
 ANALYTICAL RESULT _____ 11.2 $\mu\text{g}/100 \text{ cm}^2$ (0.0) PCB
 UNIT _____
 SAMPLE BEGINNING DEPTH (FEET BGS) _____
 ANALYTE ABBREVIATION _____
 SAMPLE COLLECTION YEAR _____

- NOTES:
1. PCB SAMPLE LOCATIONS SHOWN ARE APPROXIMATE
 2. $\mu\text{g}/100 \text{ cm}^2$ = MICROGRAMS PER 100 CENTIMETERS SQUARED
 3. mg/kg = MILLIGRAMS PER KILOGRAM
 4. ppm = PARTS PER MILLION
 5. GRAY LABEL = REMOVED SAMPLE LOCATION
 6. ANALYTE ABBREVIATION
 A-1254 = AROCLOR-1254
 A-1260 = AROCLOR-1260
 PCB = TOTAL PCBs

0 40
Feet



LEGEND

- ⊙ CONCRETE CHIP SAMPLE
- * OIL SAMPLE
- WIPE SAMPLE
- FENCE
- RAILROAD
- ROAD
- STRUCTURE
- SUBSURFACE PIT

FIGURE 2
PCB BUILDING 688 UL#02
PREVIOUS SAMPLE LOCATIONS
AND PCB CONCENTRATIONS
 INVESTIGATION AREA C2
 LENNAR MARE ISLAND, VALLEJO, CALIFORNIA

Attachment 1

MARE ISLAND NAVAL SHIPYARD
YARD ROUTE SLIP

MINI 5216/24 (REV 1-65)



PCB DECONTAMINATION TECHNICAL WORK DOCUMENT (TWD)

PCB CONTAMINATED MACHINE NO FLOOR STAIN-88

TWD NO. 95-0328

BLDG NO. 688

MARE ISLAND NAVAL SHIPYARD
VALLEJO, CALIFORNIA

Prepared by:
BRAC Environmental Technical Division
Code 106.4
Vallejo, Calif. 94592

Distribution: 300EC
300CC
106.4
106.32

**PCB DECONTAMINATION
TECHNICAL WORK DOCUMENT
INITIAL ISSUE**

| | | | |
|--------------|--|------|----------------|
| Prepared by: | <u>[Signature]</u> Code 106.4 | Date | <u>6-15-95</u> |
| Reviewed by: | <u>[Signature]</u> Code 106.4 | | <u>6-15-95</u> |
| Approved by: | <u>[Signature]</u> Code 106.4 (Project Manager) | | <u>6/15/95</u> |
| Concurrence: | <u>[Signature]</u> Code 106.32 | | <u>6-15-95</u> |

| Rev. | Description | Approval | Date |
|------|-------------|----------|------|
| | | | |

1.0 Purpose

- 1.1 The purpose of this TWD is to decontaminate stained concrete floor area of building 688, (1st floor). The stain is located in the northeast side of building 688 (see sketch on enclosure 3). The stain contains 11.2 ug/100 sq. cm. for sample 5103-0644. The result exceeds the acceptable PCB level of 10 ug/100 sq. cm. (see enclosure 1) as described in reference 3.2. The sample number should be marked near the sample location. Code 106.4 shall be contacted at 6-7657 if sample number is missing from the area.

2.0 Description

- 2.1 The floor oil stain shall be decontaminated using the procedures required by this TWD.

3.0 References

- 3.1 NAVSHIPYDMAREINST 5100.36 -- Shipyard Occupational Safety and Health Workplace Manual, Mare Island Naval Shipyard, Occupational Safety, Health, and Environmental Office -- Code 106
- 3.2 Workplan PCB Decontamination for Spill Sites, Mare Island Naval Shipyard, Code 106.4.
- 3.3 Mare Island Naval Shipyard Environmental Protection Manual of 1 February 1994

4.0 Health & Safety Section / General Notes

- 4.1 All work performed shall be in strict adherence to the shipyard Occupational Safety and Health (OSH) Manual (reference 3.1) the General Health & Safety Plan, Section 4 of reference 3.2., and the Health and Safety Section of this TWD.

- 4.2 At least two people shall be present at all times while chemical or physical hazards exist and access is being controlled to the PCB Work Area.
- 4.3 Personal protective equipment (PPE) shall be as follows:
 Saranex coated tyvek coveralls
 Viton gloves with latex gloves worn over them
 Steel toed boots (if worn without coverings shall be washed with detergent and rinsed).
 Nitrile or neoprene foot coverings may be worn over steel toed boots.
 Face shield (8" minimum) with vented goggles (while cleaning)
- 4.4 Workers performing decontamination shall have received the following training as a minimum:
 PCB Handling Controls (course YJ-B010)
 Hazcomm (course YJ-A552)
- 4.5 The main hazard at the site is PCBs on the floor. Slip and trip hazards are existent due to raised floor from water damage. Ventilation is adequate as the building is vacant and is large, and this will provide fresh air.
- 4.6 Temperatures above 100 degrees are not expected, nor is any hot work authorized, so PCBs will not be airborne.
- 4.7 Site access shall be controlled using the following areas:
 • Hot Zone - The area of the spill site. Personnel entry to the hot zone shall be minimized. The area to be decontaminated and disposed of is the hot zone plus the buffer zone.
 • Buffer Zone - A one (1) foot wide area adjacent to and surrounding the hot zone.
 • Warm Zone - An area approximately three (3) feet by six (6) feet near the hot zone established by this TWD. The warm zone shall be used for exiting PPE decontamination procedures. The warm zone shall be established prior to beginning decontamination.
 These areas shall be posted to exclude unauthorized personnel and the building shall be locked when not in use.
- 4.8 An emergency eyewash station with a 15 minute minimum capacity shall be accessible in 10 seconds or less from the work area.
- 4.9 Phone numbers are as follows:
 Hospital: 9-911 or 646-4444 Ambulance: 9-911 or 646-4444
 Spill team: 646-0182 or 0183 Fire: 9-911 or 646-3333
 Police: 9-911 or 646-2222 Project Mgr.: 646-5945
 Emergency: 9-911
- 4.10 Contact Code 106.4, L. Ramey at 6-7657 immediately after the floor decontamination. Resampling after decontamination is required by Code 106.4.
- 5.0 Decontamination Procedures
- 5.1 Support Area (Personal Decontamination)
 Personal decontamination is required for PPE and cleaning equipment that comes in contact with PCB contaminated surfaces or PCB contaminated cleaning fluid and materials. Personal decontamination shall be performed in the warm zone, as defined in Section 4.7, and shall be performed in accordance with Section 4.9 of reference 3.2. The floor of the warm zone and routes between the warm zone and the hot zones shall be covered with plastic drop cloths to avoid spread of contamination.

5.2 HSP Forms

Code 106.4 will provide minimum specific health and safety information in Section 4.0 of each TWD. This information in most cases will be sufficient. Personal preferences regarding PPE and communication methods, and changes at the decontamination site from the time the TWD was written to when the decontamination is accomplished/completed may cause a change to the health and safety information provided. Therefore, the On-Site Health and Safety Coordinator, just prior to and during decontamination, shall review HSP forms 4.6, 4.15 and 4.16 of reference 3.2 and complete forms if: 1) one of the conditions mentioned in the previous sentence exist or 2) the TWD does not cover an item, e.g. communications, on HSP form 4.16. Any down grading of health and safety information (PPE and air monitoring) will only occur upon written approval of Code 106.4. HSP Acceptance Form 4.17 (enclosure 2), must be completed and signed by each person performing decontamination.

5.3 Sampling Evolution (Place an x or number on applicable line)

Initial Sampling X Resampling (1,2,3,etc.)

5.4 Specific Instructions:

Perform decontamination of floor stain in accordance with the applicable general instructions set forth in reference 3.2, section 2, paragraph 2.5.1, and the specific requirements as follows: Before starting decon move work bench out of the way. Double wash /rinse entire stain on concrete area with industrial strength detergent or non-ionic surfactant solution, following steps in paragraph 2.5.2.1. All waste (including rags, gloves, etc.) shall be packaged and handled as PCB contaminated waste. Properly contain, store, label and dispose of contaminated debris, absorbents, rags, and other materials resulting from the decontamination. Latest disposal requirements are in reference 3.3 (Chapter 9, 4.c (1).

5.5 Other Instructions

Resampling is required (see paragraph 4.10). Code 106 4 shall take a solid sample of the concrete area.

5.6 The shop performing the decontamination shall sign below to certify that the decontamination conforms to this TWO.

5.6.1 Code 300EC performed decontamination of floor oil stains in building 688 as required.

Code 300EC _____ Date _____

Return completed information package (TWD and HSP forms) for this floor stain to the project engineer, Code 106.4 PCBs, Building 521, second floor.

6.0 Code 106.4 Engineering Review and Approval and Resampling Results Acceptance

6.1 Code 105.4 conduct review and approval of information package. Floor oil stain decontamination conforms with requirements of this TWD.

Code 106.4 _____ Date _____

6.2 Code 106.4 review and acceptance of resampling results. For results to be satisfactory they must be $\leq 10 \mu\text{g}/100 \text{ sq. cm.}$ for wipe samples and $< 50 \text{ ppm}$ for other samples where no release to the environment has occurred.

Results are: ☐ SAT ☐ UNSAT (remarks required)

Remarks: _____

Code 106.4 _____ Date _____

7.0 Enclosures

- (1) Sample Results
- (2) Health And Safety Plan Acceptance Form
- (3) Sketch



ANALYTICAL REPORT

| | | |
|----------------------------------|----------------|-----------------|
| Marine Corps Naval Shipyard | Date Sampled | 04/14/95 |
| Gate 106-14, Stop T-58 | Date Received | 04/20/95 |
| Building 1345 | Date Extracted | 04/20/95 |
| Vallejo, CA 94592-5107 | Date Analyzed | 05/13/95 |
| | Work Order No. | 55-04-516 |
| Attn: Tammi Kratzel | Method | EPA 8080 (PCBs) |
| RF Contract No. N00122-92-D-4011 | Page 12 of 20 | |

All results are reported in µg/sample.

Sample Number: 5897-95 (688/05-F2/floor oil stain #) [Stop T-58]

| Analyte | Concentration | Reportable Limit |
|--------------|---------------|------------------|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 0.2 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

Sample Number: 5898-95 (688/05-F2/floor oil stain #)

| | | |
|--------------|------|-----|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 0.45 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

ENCLOSURE 1

JUN 5 1995

Health And Safety Plan Acceptance Form

INSTRUCTIONS: This form is to be completed by each person prior to beginning work at the PCB work area. Attach the completed forms to the TWD.

TWD No.: 95-0328
PCBCM#: FLOOR STAIN 68

By my signature below, I acknowledge that I have read and understand the contents of the Health & Safety Plan for this project. I agree to perform my work in accordance with the Health and Safety Plan.

Signature

Print Name

Code

Date

By my signature below, I acknowledge that I have read and understand the contents of the Health & Safety Plan for this project. I agree to perform my work in accordance with the Health and Safety Plan.

Signature

Print Name

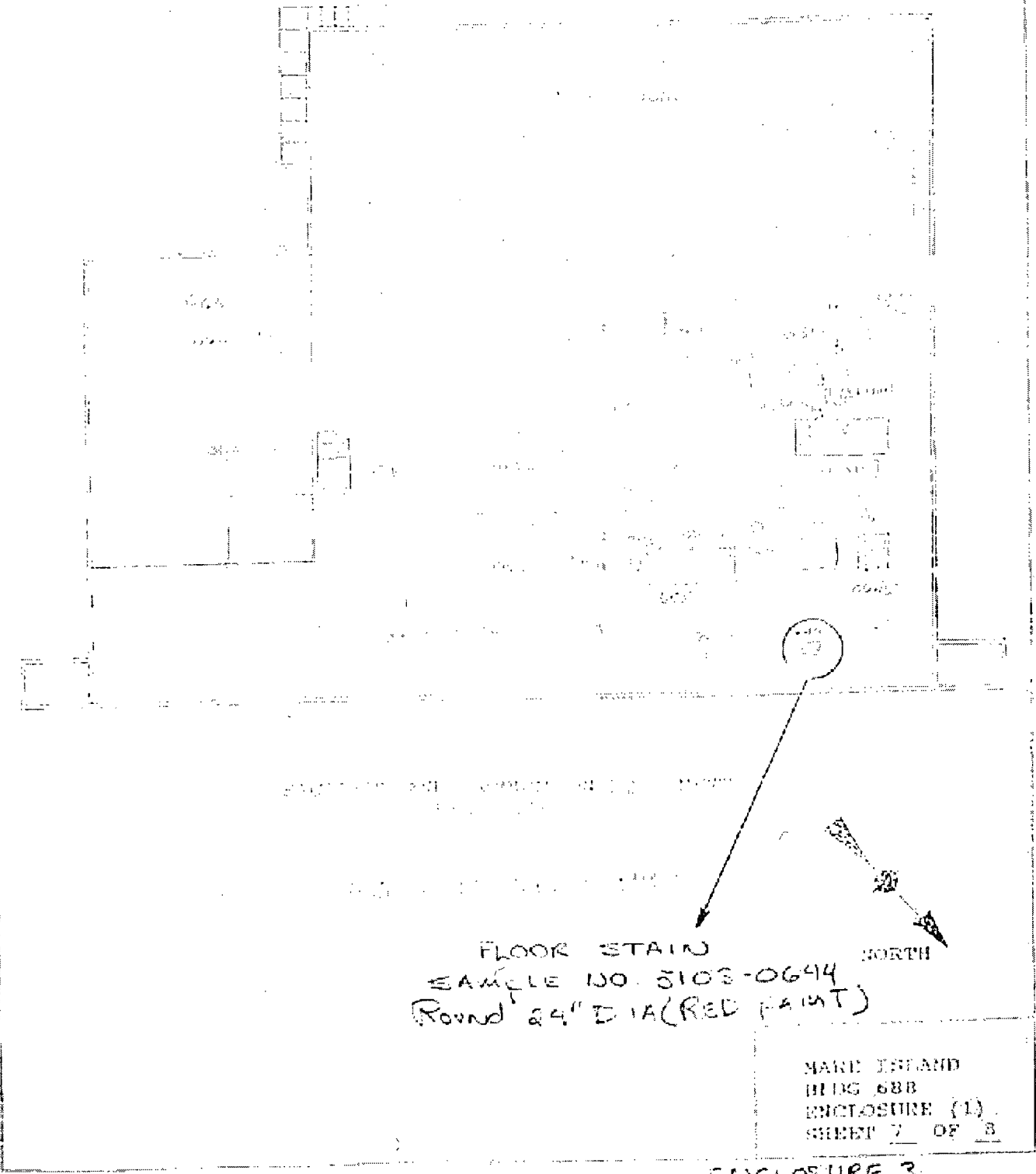
Code

Date

Enclosure 2

TWD 95-0328

ENCLOSURE 3



FLOOR STAIN
SAMPLE NO. 5103-0644
Round 24" DIA (RED PAINT)

MADE ISLAND
BING 688
ENCLOSURE (1)
SHEET 7 OF 8

ENCLOSURE 3



5005

ANALYTICAL REPORT

Mare Island Naval Shipyard
Code 106.14, Stop T-56
Building 1345
Vallejo, CA 94502-5100

Date Sampled: 04/14/95
Date Received: 04/26/95
Date Extracted: 04/26/95
Date Analyzed: 05/10/95
Work Order No.: 95-04-516
Method: EPA 8080 (PCBs)
Page 12 of 20

Attn: Tammi Kratzel
RE: Contract No. N00123-92-D-4011

All results are reported in µg/sample.

Sample Number: 5897-95 (688/05-F2/floor oil stain #) [95-04-516]

| Analyte | Concentration | Reportable Limit |
|--------------|---------------|------------------|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 11.2 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

Sample Number: 5898-95 (688/05-F2/floor oil stain #)

| | | |
|--------------|------|-----|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 2.45 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |



1032, 1042, 1052, 1062, 1072, 1082, 1092, 1102, 1112, 1122, 1132, 1142, 1152, 1162, 1172, 1182, 1192, 1202, 1212, 1222, 1232, 1242, 1252, 1262, 1272, 1282, 1292, 1302, 1312, 1322, 1332, 1342, 1352, 1362, 1372, 1382, 1392, 1402, 1412, 1422, 1432, 1442, 1452, 1462, 1472, 1482, 1492, 1502, 1512, 1522, 1532, 1542, 1552, 1562, 1572, 1582, 1592, 1602, 1612, 1622, 1632, 1642, 1652, 1662, 1672, 1682, 1692, 1702, 1712, 1722, 1732, 1742, 1752, 1762, 1772, 1782, 1792, 1802, 1812, 1822, 1832, 1842, 1852, 1862, 1872, 1882, 1892, 1902, 1912, 1922, 1932, 1942, 1952, 1962, 1972, 1982, 1992, 2002, 2012, 2022, 2032, 2042, 2052, 2062, 2072, 2082, 2092, 2102, 2112, 2122, 2132, 2142, 2152, 2162, 2172, 2182, 2192, 2202, 2212, 2222, 2232, 2242, 2252, 2262, 2272, 2282, 2292, 2302, 2312, 2322, 2332, 2342, 2352, 2362, 2372, 2382, 2392, 2402, 2412, 2422, 2432, 2442, 2452, 2462, 2472, 2482, 2492, 2502, 2512, 2522, 2532, 2542, 2552, 2562, 2572, 2582, 2592, 2602, 2612, 2622, 2632, 2642, 2652, 2662, 2672, 2682, 2692, 2702, 2712, 2722, 2732, 2742, 2752, 2762, 2772, 2782, 2792, 2802, 2812, 2822, 2832, 2842, 2852, 2862, 2872, 2882, 2892, 2902, 2912, 2922, 2932, 2942, 2952, 2962, 2972, 2982, 2992, 3002, 3012, 3022, 3032, 3042, 3052, 3062, 3072, 3082, 3092, 3102, 3112, 3122, 3132, 3142, 3152, 3162, 3172, 3182, 3192, 3202, 3212, 3222, 3232, 3242, 3252, 3262, 3272, 3282, 3292, 3302, 3312, 3322, 3332, 3342, 3352, 3362, 3372, 3382, 3392, 3402, 3412, 3422, 3432, 3442, 3452, 3462, 3472, 3482, 3492, 3502, 3512, 3522, 3532, 3542, 3552, 3562, 3572, 3582, 3592, 3602, 3612, 3622, 3632, 3642, 3652, 3662, 3672, 3682, 3692, 3702, 3712, 3722, 3732, 3742, 3752, 3762, 3772, 3782, 3792, 3802, 3812, 3822, 3832, 3842, 3852, 3862, 3872, 3882, 3892, 3902, 3912, 3922, 3932, 3942, 3952, 3962, 3972, 3982, 3992, 4002, 4012, 4022, 4032, 4042, 4052, 4062, 4072, 4082, 4092, 4102, 4112, 4122, 4132, 4142, 4152, 4162, 4172, 4182, 4192, 4202, 4212, 4222, 4232, 4242, 4252, 4262, 4272, 4282, 4292, 4302, 4312, 4322, 4332, 4342, 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6012, 6022, 6032, 6042, 6052, 6062, 6072, 6082, 6092, 6102, 6112, 6122, 6132, 6142, 6152, 6162, 6172, 6182, 6192, 6202, 6212, 6222, 6232, 6242, 6252, 6262, 6272, 6282, 6292, 6302, 6312, 6322, 6332, 6342, 6352, 6362, 6372, 6382, 6392, 6402, 6412, 6422, 6432, 6442, 6452, 6462, 6472, 6482, 6492, 6502, 6512, 6522, 6532, 6542, 6552, 6562, 6572, 6582, 6592, 6602, 6612, 6622, 6632, 6642, 6652, 6662, 6672, 6682, 6692, 6702, 6712, 6722, 6732, 6742, 6752, 6762, 6772, 6782, 6792, 6802, 6812, 6822, 6832, 6842, 6852, 6862, 6872, 6882, 6892, 6902, 6912, 6922, 6932, 6942, 6952, 6962, 6972, 6982, 6992, 7002, 7012, 7022, 7032, 7042, 7052, 7062, 7072, 7082, 7092, 7102, 7112, 7122, 7132, 7142, 7152, 7162, 7172, 7182, 7192, 7202, 7212, 7222, 7232, 7242, 7252, 7262, 7272, 7282, 7292, 7302, 7312, 7322, 7332, 7342, 7352, 7362, 7372, 7382, 7392, 7402, 7412, 7422, 7432, 7442, 7452, 7462, 7472, 7482, 7492, 7502, 7512, 7522, 7532, 7542, 7552, 7562, 7572, 7582, 7592, 7602, 7612, 7622, 7632, 7642, 7652, 7662, 7672, 7682, 7692, 7702, 7712, 7722, 7732, 7742, 7752, 7762, 7772, 7782, 7792, 7802, 7812, 7822, 7832, 7842, 7852, 7862, 7872, 7882, 7892, 7902, 7912, 7922, 7932, 7942, 7952, 7962, 7972, 7982, 7992, 8002, 8012, 8022, 8032, 8042, 8052, 8062, 8072, 8082, 8092, 8102, 8112, 8122, 8132, 8142, 8152, 8162, 8172, 8182, 8192, 8202, 8212, 8222, 8232, 8242, 8252, 8262, 8272, 8282, 8292, 8302, 8312, 8322, 8332, 8342, 8352, 8362, 8372, 8382, 8392, 8402, 8412, 8422, 8432, 8442, 8452, 8462, 8472, 8482, 8492, 8502, 8512, 8522, 8532, 8542, 8552, 8562, 8572, 8582, 8592, 8602, 8612, 8622, 8632, 8642, 8652, 8662, 8672, 8682, 8692, 8702, 8712, 8722, 8732, 8742, 8752, 8762, 8772, 8782, 8792, 8802, 8812, 8822, 8832, 8842, 8852, 8862, 8872, 8882, 8892, 8902, 8912, 8922, 8932, 8942, 8952, 8962, 8972, 8982, 8992, 9002, 9012, 9022, 9032, 9042, 9052, 9062, 9072, 9082, 9092, 9102, 9112, 9122, 9132, 9142, 9152, 9162, 9172, 9182, 9192, 9202, 9212, 9222, 9232, 9242, 9252, 9262, 9272, 9282, 9292, 9302, 9312, 9322, 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13712, 13722, 13732, 13742, 13752, 13762, 13772, 13782, 13792, 13802, 13812, 13822, 13832, 13842, 13852, 13862, 13872, 13882, 13892, 13902, 13912, 13922, 13932, 13942, 13952, 13962, 13972, 13982, 13992, 14002, 14012, 14022, 14032, 14042, 14052, 14062, 14072, 14082, 14092, 14102, 14112, 14122, 14132, 14142, 14152, 14162, 14172, 14182, 14192, 14202, 14212, 14222, 14232, 14242, 14252, 14262, 14272, 14282, 14292, 14302, 14312, 14322, 14332, 14342, 14352, 14362, 14372, 14382, 14392, 14402, 14412, 14422, 14432, 14442, 14452, 14462, 14472, 14482, 14492, 14502, 14512, 14522, 14532, 14542, 14552, 14562, 14572, 14582, 14592, 14602, 14612, 14622, 14632, 14642, 14652, 14662, 14672, 14682, 14692, 14702, 14712, 14722, 14732, 14742, 14752, 14762, 14772, 14782, 14792, 14802, 14812, 14822, 14832, 14842, 14852, 14862, 14872, 14882, 14892, 14902, 14912, 14922, 14932, 14942, 14952, 14962, 14972, 14982, 14992, 15002, 15012, 15022, 15032, 15042, 15052, 15062, 15072, 15082, 15092, 15102, 15112, 15122, 15132, 15142, 15152, 15162, 15172, 15182, 15192, 15202, 15212, 15222, 15232, 15242, 15252, 15262, 15272, 15282, 15292, 15302, 15312, 15322, 15332, 15342, 15352, 15362, 15372, 15382, 15392, 15402, 15412, 15422, 15432, 15442, 15452, 15462, 15472, 15482, 15492, 15502, 15512, 15522, 15532, 15542, 15552, 15562, 15572, 15582, 15592, 15602, 15612, 15622, 15632, 15642, 15652, 15662, 15672, 15682, 15692, 15702, 15712, 15722, 15732, 15742, 15752, 15762, 15772, 15782, 15792, 15802, 15812, 15822, 15832, 15842, 15852, 15862, 15872, 15882, 15892, 15902, 15912, 15922, 15932, 15942, 15952, 15962, 15972, 15982, 15992, 16002, 16012, 16022, 16032, 16042, 16052, 16062, 16072, 16082, 16092, 16102, 16112, 16122, 16132, 16142, 16152, 16162, 16172, 16182, 16192, 16202, 16212, 16222, 16232, 16242, 16252, 16262, 16272, 16282, 16292, 16302, 16312, 16322, 16332, 16342, 16352, 16362, 16372, 16382, 16392, 16402, 16412, 16422, 16432, 16442, 16452, 16462, 16472, 16482, 16492, 16502, 16512, 16522, 16532, 16542, 16552, 16562, 16572, 16582, 16592, 16602, 16612, 16622, 16632, 16642, 16652, 16662, 16672, 16682, 16692, 16702, 16712, 16722, 16732, 16742, 16752, 16762, 16772, 16782, 16792, 16802, 16812, 16822, 16832, 16842, 16852, 16862, 16872, 16882, 16892, 16902, 16912, 16922, 16932, 16942, 16952, 16962, 16972, 16982, 16992, 17002, 17012, 17022, 17032, 17042, 17052, 17062, 17072, 17082, 17092, 17102, 17112, 17122, 17132, 17142, 17152, 17162, 17172, 17182, 17192, 17202, 17212, 17222, 17232, 17242, 17252, 17262, 17272, 17282, 17292, 17302, 17312, 17322, 17332, 17342, 17352, 17362, 17372, 17382, 17392, 17402, 17412, 17422, 17432, 17442, 17452, 17462, 17472, 17482, 17492, 17502, 17512, 17522, 17532, 17542, 17552, 17562, 17572, 17582, 17592, 17602, 17612, 17622, 17632, 17642, 17652, 17662, 17672, 17682, 17692, 17702, 17712, 17722, 17732, 17742, 17752, 17762, 17772, 17782, 17792, 17802, 17812, 17822, 17832, 17842, 17852, 17862, 17872, 17882, 17892, 17902, 17912, 17922, 17932, 17942, 17952, 17962, 17972, 17982, 17992, 18002, 18012, 18022, 18032, 18042, 18052, 18062, 18072, 18082, 18092, 18102, 18112, 18122, 18132, 18142, 18152, 18162, 18172, 18182, 18192, 18202, 18212, 18222, 18232, 18242, 1

CHAIN OF CUSTODY RECORD dtd 04/17/95

95-m-0905

Doc Num 51070427 Page 2 of 4

ADDRESS BLOCK

From Tammi Kratzel
MINSY Code 106.14 Stop T56 Bldg 1345
Vallejo, CA 94592-5100
Tel (707) 646-0181 Fax (707) 646-0184

To Col Science Environmental Laboratories, Inc.
11631 Redwood Circle
Stanton, CA 90680
Tel (714) 895-5494 Fax (714) 894-7501

INSTRUCTION BLOCK

Turnaround Time:

Written QC Report Required?

☐ Same Day ☐ 24 Hrs ☐ 48 Hrs ☐ 5 Days ☒ 10 Days ☐ Rush

☒ Routine QC ☐ RMQC

PCB SAMPLE DATA BLOCK

| C106.14 Sample Number | C106.4 Sample ID | Location/Parcel/Description | Sampling Date | Time | Oil Grab | Water Grab | Solid/Split Filter | Num. Cont Type | Cont. Size | Analysis Required |
|-----------------------------|------------------------|-----------------------------|------------------|-------|-------------|---------------|-----------------------|-------------------|------------|-------------------|
| 5895-95 | 5103-0642 | 688/05-F2/floor oil stain # | 04/14/95 | 13:29 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5896-95 | 5103-0643 | 688/05-F2/floor oil stain # | 04/14/95 | 13:33 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5897-95 | 5103-0644 | 688/05-F2/floor oil stain # | 04/14/95 | 13:49 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5898-95 | 5103-0645 | 688/05-F2/floor oil stain # | 04/14/95 | 13:55 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5899-95 | 5103-0646 | 688/05-F2/floor oil stain # | 04/14/95 | 14:05 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5900-95 | 5103-0647 | 688/05-F2/floor oil stain # | 04/14/95 | 14:15 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5901-95 | 5103-0648 | 688/05-F2/floor oil stain # | 04/14/95 | 14:21 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5902-95 | 5103-0649 | 688/05-F2/floor oil stain # | 04/14/95 | 14:31 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5903-95 | 5103-0650 | 688/05-F2/floor oil stain # | 04/14/95 | 14:35 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |
| 5904-95 | 5103-0651 | 688/05-F2/floor oil stain # | 04/14/95 | 14:55 | 1 | 1 | (X) | (2) | (1) 1 40ml | 3001AF |

Type: (1) swipe mm ext, (2) swipe spill, (3) swipe resy int, (4) solid spill, (5) oil resy mm, (6) water grab, (7) blank

CHAIN OF CUSTODY RECORD

| | | | |
|----------------------------------|--------------------------------------|---------------|------------|
| Date Transferred by: (Signature) | Received by: (Signature) | Date: 4/17/95 | Time: 0900 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: 4/17/95 | Time: 1000 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: 4/17/95 | Time: 1100 |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| Relinquished by: (Signature) | Received for Laboratory: (Signature) | Date: | Time: |

PCB SURVEY AND SAMPLE DATA SHEET (ADDON SHEET)

DESCRIPTION BLOCK

| | | | |
|---------------------------|--------------------|--------------------------|--------------------|
| Site: <u>13</u> | Phase: <u>1</u> | County: <u>1</u> | Map Grid: <u>1</u> |
| Desc: <u>13</u> | Code: <u>1</u> | Name: <u>1</u> | Model: <u>1</u> |
| Property Number: <u>1</u> | Altitude: <u>1</u> | Area of Sample: <u>1</u> | |

PCB SAMPLE DATA BLOCK

| Sample ID | Date | Time | Oil Grab | Water Grab | Solid/Soil Filter | Type | Cont. Size | Remarks |
|-----------|---------|-------|----------|------------|-------------------|------|------------|---------|
| S103-0640 | 4-11-85 | 10:00 | 11 | 11 | 11 | 11 | 11 | |
| S103-0641 | 4-11-85 | 10:05 | 11 | 11 | 11 | 11 | 11 | |
| S103-0642 | 4-11-85 | 10:10 | 11 | 11 | 11 | 11 | 11 | |
| S103-0643 | 4-11-85 | 10:15 | 11 | 11 | 11 | 11 | 11 | |
| S103-0644 | 4-11-85 | 10:20 | 11 | 11 | 11 | 11 | 11 | |
| S103-0645 | 4-11-85 | 10:25 | 11 | 11 | 11 | 11 | 11 | |
| S103-0646 | 4-11-85 | 10:30 | 11 | 11 | 11 | 11 | 11 | |
| S103-0647 | 4-11-85 | 10:35 | 11 | 11 | 11 | 11 | 11 | |
| S103-0648 | 4-11-85 | 10:40 | 11 | 11 | 11 | 11 | 11 | |

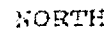
Type: (1) swipe on ext, (2) swipe spill, (3) wipe recd int, (4) solid spill, (5) oil res em, (6) water grab, (7) blank

SKETCH BLOCK

Samples were taken, labeled, sealed, recorded, stored and secured from tampering by unauthorized personnel as required by: Section 3 of "Work Plan PCB Survey and Sampling For Mechanical Machinery"; or "Work Plan PCB Survey and Sampling for Possible Spill Sites".

| | | |
|----------------|---------------------|----------------------|
| Name: <u>1</u> | Badge Num: <u>1</u> | Date: <u>4-11-85</u> |
| Name: <u>1</u> | Badge Num: <u>1</u> | Date: <u>4-11-85</u> |
| Name: <u>1</u> | Badge Num: <u>1</u> | Date: <u>4-11-85</u> |

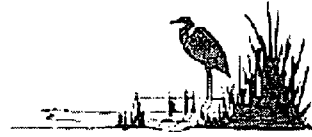
The image is a very poor quality scan of a document. It shows a large rectangular area with several smaller rectangular boxes inside, suggesting a form or a table. The text is completely illegible due to the low contrast and noise. There are some faint markings that might be numbers or letters, but they cannot be read.

[illegible]

MARE ISLAND
BLDG 680
ENCLOSURE (1)
SHEET 7 OF 8

MARE ISLAND NAVAL SHIPYARD
YARD ROUTE SLIP

[illegible]



PCB DECONTAMINATION TECHNICAL WORK DOCUMENT (TWD)

PCB CONTAMINATED MACHINE NO FLOOR STAIN-88

TWD NO. 95-0340

BLDG NO. 688

MARE ISLAND NAVAL SHIPYARD
VALLEJO, CALIFORNIA

Prepared by:
BRAC Environmental Technical Division
Code 106.4
Vallejo, Calif. 94592

Distribution: 300EC
300CC
106.4
106.32

**PCB DECONTAMINATION
TECHNICAL WORK DOCUMENT
INITIAL ISSUE**

| | | Date |
|--------------|--|----------------|
| Prepared by: | <u>Samuel Wooten</u> Code 106.4 | <u>6/16/95</u> |
| Reviewed by: | <u>William Long</u> Code 106.4 | <u>6-16-95</u> |
| Approved by: | <u>McRaine</u> Code 106.4 (Project Manager) | <u>6/16/95</u> |
| Concurrence: | <u>William Long</u> Code 106.32 | <u>6/17/95</u> |

| Rev. | Description | Approval | Date |
|------|-------------|----------|------|
| | | | |

1.0 Purpose

- 1.1 The purpose of this TWD is to decontaminate stained area on the painted concrete area of building 688, (1st floor). The stain is located in the southeast end of building 688 (see sketch on enclosure 3). The stain contains 15.1 ug/100 sq. cm. for sample 5103-0668. The result exceeds the acceptable PCB level of 10 ug/100 sq. cm. (see enclosure 1) as described in reference 3.2. The sample number should be marked near the sample location. Code 106.4, B. Turner shall be contacted at 6-2471 if sample number is missing from the area.

2.0 Description

- 2.1 The floor oil stain shall be decontaminated using the procedures required by this TWD.

3.0 References

- 3.1 NAVSHIPYDMAREINST 5100.36 – Shipyard Occupational Safety and Health Workplace Manual, Mare Island Naval Shipyard, Occupational Safety, Health, and Environmental Office – Code 106
- 3.2 Workplan PCB Decontamination for Spill Sites, Mare Island Naval Shipyard, Code 106.4.
- 3.3 Mare Island Naval Shipyard Environmental Protection Manual of 1 February 1994

4.0 Health & Safety Section / General Notes

- 4.1** All work performed shall be in strict adherence to the shipyard Occupational Safety and Health (OSH) Manual (reference 3.1) the General Health & Safety Plan, Section 4 of reference 3.2., and the Health and Safety Section of this TWD.
- 4.2** At least two people shall be present at all times while chemical or physical hazards exist and access is being controlled to the PCB Work Area.
- 4.3** Personal protective equipment (PPE) shall be as follows:
Saranex coated tyvek coveralls
Viton gloves with latex gloves worn over them
Steel toed boots (if worn without coverings shall be washed with detergent and rinsed).
Nitrile or neoprene foot coverings may be worn over steel toed boots.
Face shield (8" minimum) with vented goggles (while cleaning)
- 4.4** Workers performing decontamination shall have received the following training as a minimum:
PCB Handling Controls (course YJ-B010)
Hazcomm (course YJ-A552)
- 4.5** The main hazard at the site is PCBs on the floor. Ventilation is adequate as the building is vacant and is large, and this will provide fresh air.
- 4.6** Temperatures above 100 degrees are not expected, nor is any hot work authorized, so PCBs will not be airborne.
- 4.7** Site access shall be controlled using the following areas:
• Hot Zone - The area of the spill site. Personnel entry to the hot zone shall be minimized. The area to be decontaminated is the hot zone plus the buffer zone.
• Buffer Zone - A one (1) foot wide area adjacent to and surrounding the hot zone.
• Warm Zone - An area approximately three (3) feet by six (6) feet near the hot zone established by this TWD. The warm zone shall be used for exiting PPE decontamination procedures. The warm zone shall be established prior to beginning decontamination.
These areas shall be posted to exclude unauthorized personnel and the building shall be locked when not in use.
- 4.8** An emergency eyewash station with a 15 minute minimum capacity shall be accessible in 10 seconds or less from the work area.
- 4.9** Phone numbers are as follows:
Hospital: 9-911 or 646-4444 Ambulance: 9-911 or 646-4444
Spill team: 646-0182 or 0183 Fire: 9-911 or 646-3333
Police: 9-911 or 646-2222 Project Mgr.: 646-5945
Emergency: 9-911
- 4.10** Contact Code 106.4, B.Turner at 6-2471 immediately after the floor decontamination. Resampling after decontamination is required by Code 106.4.
- 5.0 Decontamination Procedures**

5.1 Support Area (Personal Decontamination)

Personal decontamination is required for PPE and cleaning equipment that comes in contact with PCB contaminated surfaces or PCB contaminated cleaning fluid and materials. Personal decontamination shall be performed in the warm zone, as defined in Section 4.7, and shall be performed in accordance with Section 4.9 of reference 3.2. The floor of the warm zone and routes between the warm zone

5.2 HSP Forms

5.3 Sampling Evolution (Place an x or number on applicable line)

5.4 Specific Instructions:

5.5 Other Instructions

5.6 The shop performing the decontamination shall sign below to certify that the decontamination conforms to this TWD.

Code 300EC _____ Date _____

3

TWD 95-0340

6.0 Code 106.4 Engineering Review and Approval and Resampling Results Acceptance

- 6.1** Code 106.4 conduct review and approval of information package. Floor oil stain decontamination conforms with requirements of this TWD.

Code 106.4 _____ Date _____

- 6.2** Code 106.4 review and acceptance of resampling results. For results to be satisfactory they must be $\leq 10 \mu\text{g}/100 \text{ sq. cm.}$ for wipe samples and $< 50 \text{ ppm}$ for other samples where no release to the environment has occurred.

Results are: ☐ SAT ☐ UNSAT (remarks required)

Remarks: _____

Code 106.4 _____ Date _____

7.0 Enclosures

- (1) Sample Results
- (2) Health And Safety Plan Acceptance Form
- (3) Sketch



Handwritten signature

ANALYTICAL REPORT

| | | |
|-----------------------------------|----------------|-----------------|
| Mare Island Naval Shipyard | Date Sampled | 04/17/95 |
| Code 100.14, Stop T-56 | Date Received | 04/25/95 |
| Building 1345 | Date Extracted | 04/28/95 |
| Vallejo, CA 94592-5100 | Date Analyzed | 05/05/95 |
| Attn: Tammi Kratzel | Work Order No. | 95-04-517 |
| RE: Contract No. N00123-92-D-4011 | Method | EPA 8080 (PCBs) |
| | Page | 1 of 6 |

All results are reported in µg/sample.

Sample Number: 5978-95 (688/05-F2/misc & oil stain #)

| Analyte | Concentration | Reportable Limit |
|--------------|---------------|------------------|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 4.99 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

Sample Number: 5979-95 (688/05-F2/misc & oil stain #) [5103-0668]

| | | |
|--------------|------|-----|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 15.1 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

Enclosure 1

Health And Safety Plan Acceptance Form

INSTRUCTIONS: This form is to be completed by each person prior to beginning work at the PCB work area. Attach the completed forms to the TWD.

TWD No.: 95-0340

PCBCM#: FLOOR STAIN -88

By my signature below, I acknowledge that I have read and understand the contents of the Health & Safety Plan for this project. I agree to perform my work in accordance with the Health and Safety Plan.

Signature

Print Name

Code

Date

By my signature below, I acknowledge that I have read and understand the contents of the Health & Safety Plan for this project. I agree to perform my work in accordance with the Health and Safety Plan.

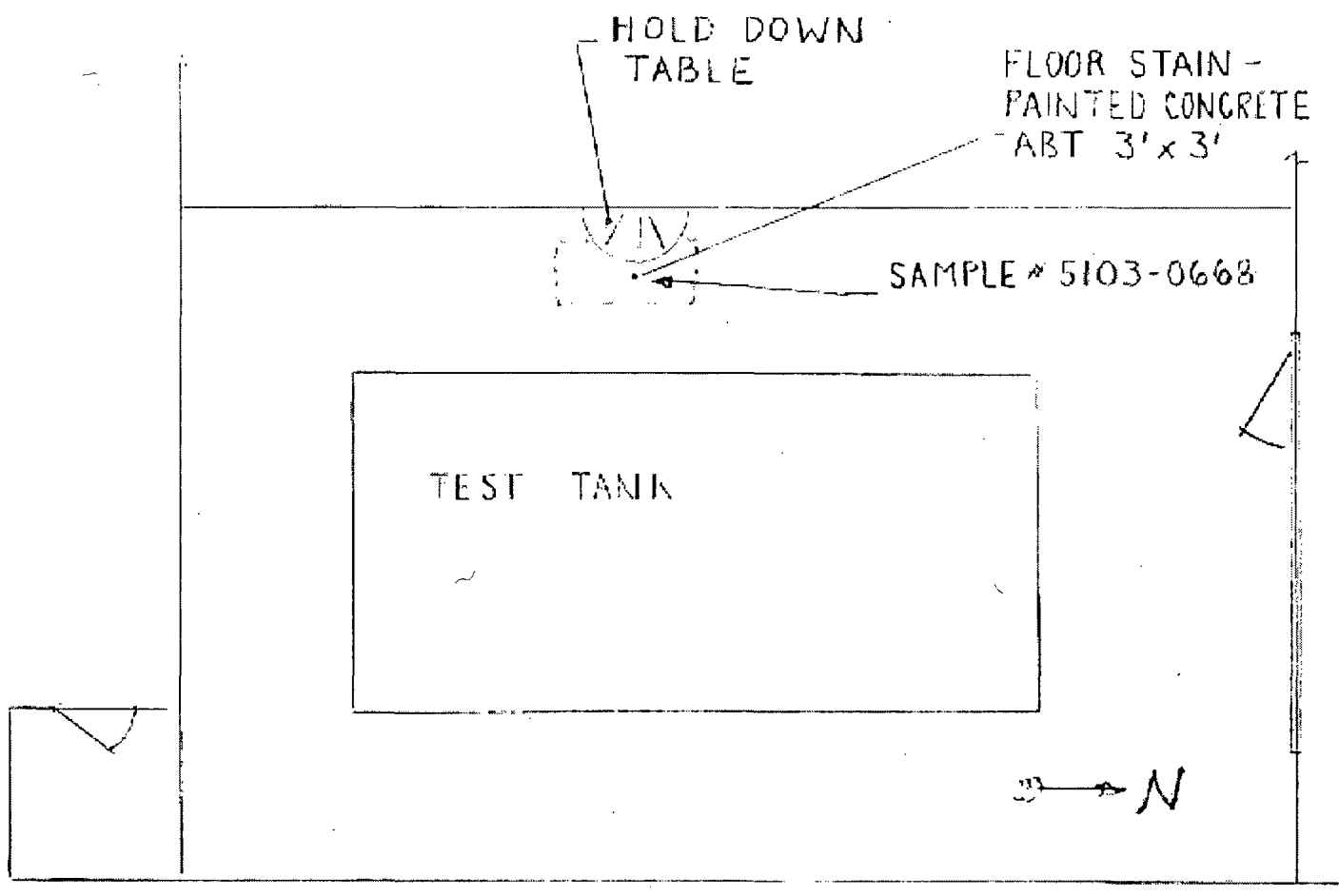
Signature

Print Name

Code

Date

Enclosure 2



PLAN VIEW
BLDG. 688-SOUTHEAST CORNER
OF BUILDING

SKETCH- FLOOR STAIN BLDG. 688

UIC# 02242

MARE ISLAND NAVAL SHIPYARD
YARD ROUTE SLIP

| | | | | |
|-----------------|------|------------------|---------------------|--------------|
| EDS 106.4PCB | STOP | NAME L. RAMEY | EXTENSION 6-7657 | DATE 6/15 |
|-----------------|------|------------------|---------------------|--------------|

| | | | |
|--|--------------------------------------|--|------------------------------------|
| <input checked="" type="checkbox"/> ACTION | <input type="checkbox"/> COORDINATE | <input type="checkbox"/> PREPARE DRAFT | <input type="checkbox"/> RETENTION |
| <input type="checkbox"/> AS DISCUSSED | <input type="checkbox"/> FILE | <input type="checkbox"/> PREPARE FOR SIGNATURE | <input type="checkbox"/> RETURN |
| <input type="checkbox"/> COMMENT/CONCUR | <input type="checkbox"/> INFORMATION | <input type="checkbox"/> REPORT BACK | <input type="checkbox"/> |

| TO CODE 1-6 | INITIALED | | SUBJECT |
|-------------------|-----------|------|---|
| | BY | DATE | |
| | | | REQUEST FOR TWD ACTION |
| P | AINE | | COMMENTS (SEE ATTACHED ANALYSIS RECORD) |
| | | | EQUIPMENT DESCRIPTION: |
| V | ARNAU | 6/15 | |
| | | | EQUIPMENT ID NO: |
| | | | |
| | | | EQUIPMENT LOCATION: |
| | | | |
| | | | SAMPLE TYPE: |
| | | | |
| | | | SCHEDULED DISPOSITION: |
| | | | |
| | | | |
| | | | |
| | | | |

TWD # 95-340



ANALYTICAL REPORT

| | | |
|-----------------------------------|----------------|-----------------|
| More Island Naval Shipyard | Date Sampled | 04/17/95 |
| Coxie 106.14, Stop 1-56 | Date Received | 04/20/95 |
| Building 1345 | Date Extracted | 04/28/95 |
| Vallejo, CA 94592-5100 | Date Analyzed | 06/05/95 |
| | Work Order No. | 95-04-517 |
| Attn: Tamara Kratzel | Method | EPA 8080 (PCBs) |
| RE: Contract No. N00123-92-D-4011 | Page 1 of 6 | |

All results are reported in $\mu\text{g}/\text{sample}$.

Sample Number: 5978-95 (688/05-F2/misc & oil stain #)

| Analyte | Concentration | Reportable Limit |
|--------------|---------------|------------------|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 4.09 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

Sample Number: 5979-95 (688/05-F2/misc & oil stain #) [5102-0668]

| | | |
|--------------|------|-----|
| Aroclor-1016 | ND | 0.1 |
| Aroclor-1221 | ND | 0.1 |
| Aroclor-1232 | ND | 0.1 |
| Aroclor-1242 | ND | 0.1 |
| Aroclor-1248 | ND | 0.1 |
| Aroclor-1254 | 15.1 | 0.1 |
| Aroclor-1260 | ND | 0.1 |
| Aroclor-1262 | ND | 0.1 |

CHAIN OF CUSTODY RECORD dtd 04/17/95

Doc Num 51070435 Page 1 of 2

95-m-0905

C&T

ADDRESS BLOCK

From Tammi Kratzel
MIRSY Code 106.14 Stop T56 Bldg 1345
Vallejo, CA 94592-5100
Tel (707) 646-0181 Fax (707) 646-0184

To Cal Science Environmental Laboratories, Inc.
11541 Seaboard Circle
San Jose, CA 95130
Tel (714) 895-5494 Fax (714) 894-7501

INSTRUCTION BLOCK

Turnaround Time:

Written QC Report Required?

☐ Same Day ☐ 24 Hrs ☐ 48 Hrs ☐ 5 Days ☒ 10 Days ☐ Rush

☒ Routine QC ☐ RWCQ

PCB SAMPLE DATA BLOCK

| C105.14 Sample Number | C106.4 Sample ID | Location/Parcel/Description | Sampling Date | Time | Oil Grab | Water Grab | Solid/Soil Filter | Type | Num Cont | Cont Size | Analysis Required |
|-----------------------------|------------------------|-----------------------------------|------------------|-------|-------------|---------------|----------------------|------|-------------|--------------|-------------------|
| 5978-95 | 5103-0667 | 688/05-F2/misc & oil stain # | 04/17/95 | 8:05 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5979-95 | 5103-0668 | 688/05-F2/misc & oil stain # | 04/17/95 | 8:15 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5980-95 | 5103-0669 | 688/05-F2/misc & oil stain # | 04/17/95 | 8:30 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5981-95 | 5103-0670 | 688/05-F2/misc & oil stain # | 04/17/95 | 8:45 | (X) | [1] | [1] | (5) | (1) | 40-11 | 100PP |
| 5982-95 | 5103-0671 | 688/05-F2/misc & oil stain # | 04/17/95 | 9:00 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5983-95 | 5103-0672 | 688/05-F2/misc & oil stain # | 04/17/95 | 9:15 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5984-95 | 5103-0673 | 688/05-F2/misc & oil stain # | 04/17/95 | 9:30 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5985-95 | 5103-0674 | 688/05-F2/misc & oil stain # RANK | 04/17/95 | 9:45 | [1] | [1] | (X) | 7-30 | (1) | 40-11 | 100PP |
| 5986-95 | 5103-0676 | 688/05-F2/misc oil stain # | 04/17/95 | 10:00 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |
| 5987-95 | 5103-0677 | 688/05-F2/misc oil stain # | 04/17/95 | 10:15 | [1] | [1] | (X) | (2) | (1) | 40-11 | 100PP |

Type: [1] swipe-mn ext, [2] swipe spill, [3] swipe/deny int, [4] solid soil, [5] oil res mn, [6] water grab, [7] bulk

CHAIN OF CUSTODY RECORD

| | | | | | |
|----------------------------------|--------------------|--------------------------------------|--------------------|-------|---------|
| Data Transferred by: (Signature) | <i>[Signature]</i> | Date: | 4/17/95 | Time: | 1500 |
| Relinquished by: (Signature) | <i>[Signature]</i> | Received by: (Signature) | <i>[Signature]</i> | Date: | 4/17/95 |
| Relinquished by: (Signature) | <i>[Signature]</i> | Received by: (Signature) | <i>[Signature]</i> | Date: | 4/17/95 |
| Relinquished by: (Signature) | <i>[Signature]</i> | Received by: (Signature) | <i>[Signature]</i> | Date: | 4/19/95 |
| Relinquished by: (Signature) | <i>[Signature]</i> | Received by: (Signature) | <i>[Signature]</i> | Date: | 4/19/95 |
| Relinquished by: (Signature) | <i>[Signature]</i> | Received for Laboratory: (Signature) | <i>[Signature]</i> | Date: | 4/19/95 |

C

Bldg. _____ Floor _____ Room _____ Dept. _____
 (Date) _____ Printed _____ Printed Again _____ Printed Yet Again _____
 Property Number _____ Alaska _____ Other US Territory _____

| Sample ID | Date | Time | Oil Grab | Water Grab | Solid/5-sift Filter | Type | Cont Size | Remarks |
|-----------|---------|-------|----------|------------|---------------------|------|-----------|------------------------|
| 5103-0667 | 4-12-95 | 8:30 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0668 | 4-12-95 | 8:45 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0669 | 4-12-95 | 9:00 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0670 | 4-12-95 | 9:15 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0671 | 4-12-95 | 9:30 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0672 | 4-12-95 | 9:45 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0673 | 4-12-95 | 10:00 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0674 | 4-12-95 | 10:15 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |
| 5103-0675 | 4-12-95 | 10:30 | (1) | (1) | (1) | (2) | (1) | FLUID OIL SPILL SAMPLE |

Type: (1) swipe up ext, (2) swipe spill, (3) swipe reg. bot, (4) solid spill, (5) oil res em, (6) water grab, (7) blank

| | | |
|---------------------------|-------------------------|----------------------|
| Name <u>John Taylor</u> | Badge Num <u>59560</u> | Date <u>7-17-85</u> |
| Name <u>Paula B. King</u> | Badge Num <u>123200</u> | Date <u>11-17-85</u> |
| Name <u>J. H. Brown</u> | Badge Num <u>23395</u> | Date <u>4-1-85</u> |

